

Financial Analysis

Although the growth in U.S. healthcare spending has abated somewhat since 2008, most health economists and actuaries believe that spending levels going forward will continue to outpace general inflation and growth of the economy without significant changes in healthcare financing and care delivery, like those contemplated in our State Healthcare Innovation Plan.

By fully and successfully implementing the changes in healthcare payment and care delivery outlined in this plan, we project that we will create more than \$3 billion in value over 5 years from 2015 through 2019. After accounting for reinvestments to improve quality, access, and consumer experience, as well as program investments to support model implementation, provider practice transformation, and health information technology, we project a net \$1 billion per year in savings by 2019, contributing to improved affordability.

This level of near-term savings, realized through reductions in waste and inefficiency in the system, would reduce the rate of increase in healthcare spending by 1-2 percentage points within 5 years for participating payers, bringing the rate of growth in healthcare spending more closely in line with the growth of our economy after adjusting for general inflation and significantly reducing the extent to which healthcare spending crowds out real wage growth or investments in education, housing, and other critical needs.

BASELINE HEALTHCARE SPENDING

Healthcare economists and actuaries differ in their forecasts for healthcare spending growth. While the rate of increase in healthcare spending may be influenced by macro-economic and other factors outside the scope of our Plan, for purposes of our financial analysis we have assumed a baseline of approximately 5% average increase in healthcare spending without the changes described in this plan. After adjusting for 1-3% inflation, this translates to 2-4% real growth in healthcare spending. If we were to achieve 1-2% increase in gross state product per capita, this would translate to healthcare spending growth of 1-3 percentage points in excess of real productivity gains for our economy.

This includes 5.5% increase in spending for Commercially insured and self-insured populations (2.1 million in Connecticut in 2012 to 2.2 million in 2019), based on 0.5% annual growth in the number of covered persons and 5% annual growth in the cost per person per year.

Medicare costs in Connecticut are estimated at \$8.5 billion in 2014, based on approximately \$14,300 per each of 600,000 Medicare beneficiaries. We have assumed

that without the changes outlined in our Plan, total costs would increase to more than \$10 billion by 2019, based on about 1% annual growth in beneficiaries (to 625,000) and 3% annual increase in spending per beneficiary (to about \$16,600).

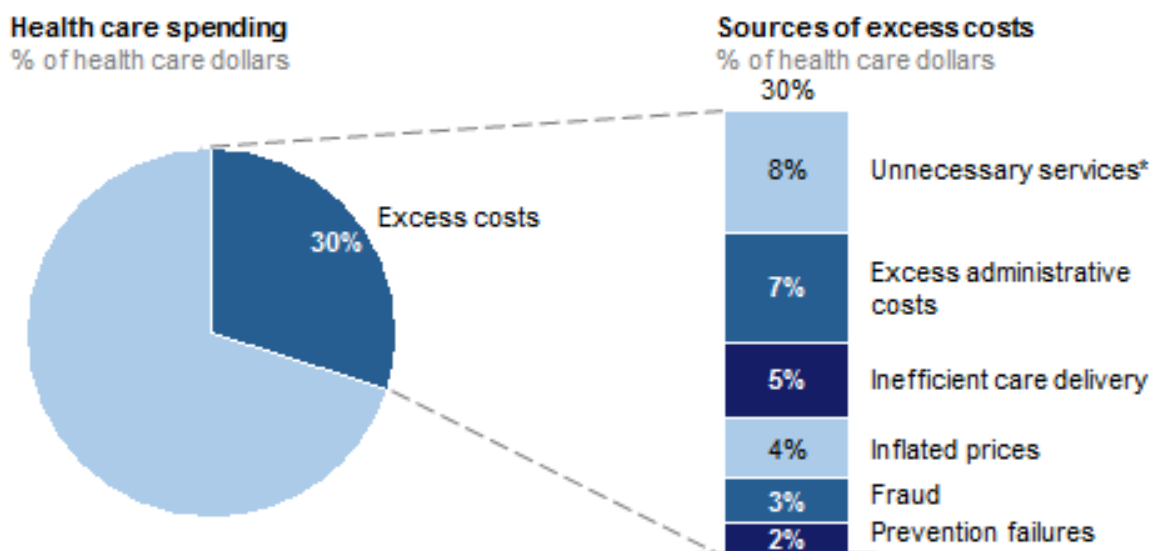
Medicaid claims costs in Connecticut were \$5.9 billion in 2012. These costs are shared between state general revenues and federal matching payments. We estimate that more than 50% of these costs are for long-term services and supports and other costs that are not directly addressed by our Advanced Medical Home model and are addressed by Connecticut's Integrated Care Demonstration and other initiatives that pre-date our State Innovation Models initiative. Accordingly, our financial analysis of impact for Medicaid is restricted to \$2.7 billion in spending (in 2012) for 592,000 enrollees directly addressed by the AMH model as described in our plan at an average of \$4,500 per enrollee. Without implementation of our Plan, we estimate these costs would increase to \$3.25 billion by 2019 based on 3% annual growth in enrollment (to 694,000 in 2019) and 2% growth in per cost per enrollee (to \$5,170 by 2019).

The growth in Medicaid spending outlined above excludes the costs associated with Medicaid expansion based on the Affordable Care Act. We project that by 2019, we will cover approximately 189,000 enrollees based on expansion of Medicaid under the Affordable Care Act, at a total cost of approximately \$975 million in 2019, to be largely covered by federal spending.

POTENTIAL IMPACT BEFORE INVESTMENTS

Research by the Institute of Medicine has suggested that approximately 30% of healthcare spending is unnecessary. This is consistent with the findings of many dozens of research studies by a range of academic and other research institutes.

Institute of Medicine Findings



*Includes: overuse—beyond evidence-established standards; discretionary use beyond benchmarks; and unnecessary choice of higher-cost services
 SOURCE: Institute of Medicine September 2012 report on 2009 health care spend

Analysis of Medicaid, Medicare, and Commercial costs in Connecticut uncovers many of the same circumstances that contribute to preventable healthcare costs found in the IOM report, and as addressed by examples of successful population-based models used in our benchmarking. For example:

- About 40% of our Medicaid enrollees have chronic conditions, and account for nearly 70% of our Medicaid spending, excluding dual eligible;¹ this includes spending on acute events that could be prevented through more effective management of chronic conditions.
- Only 69.4% of the state's diabetic patients received a dilated eye exam, significantly lower than the 82.1% national benchmark.²
- Risk-adjusted cost of care is 20% higher for relatively healthy Medicaid patients who access the system directly through specialists without care by a primary care physician.³

¹ McKinsey analysis of Connecticut 2012 Medicaid claims data

² CDC, Diabetes Report Card

³ McKinsey analysis of Connecticut 2012 Medicaid claims data

- Medicare announced recently that 24 of Connecticut's 31 hospitals in Connecticut will face Medicare readmission penalties in the next fiscal year.
- Our medical readmission rate for Medicaid was 11.8% in 2011, the highest rate among peer states – tied only with New York Medicaid –and much higher than the peer-state benchmark of 9.4%.⁴
- Connecticut has a 26% higher per-capita use of the Emergency Department than neighboring Massachusetts, despite similar demographics and health risk; and nearly 50% of our ED visits are for non-urgent needs, reflecting potential primary care access challenges.⁵

During the course of our work, our Care Delivery workgroup reviewed research examining more than 20 examples of population-based models for improving care delivery in conjunction with value-based payment. These included examples ranging from independent primary care practices participating in PCMH models, to ACOs formed by hospital systems, medical groups, and/or IPAs; as well as health systems including financially integrated physicians and hospitals. The impact of these models has been wide ranging, most averaging 1-2 percentage points reduction in trend, or 6-12% total reduction in costs over a 5-year period.⁶

⁴ Connecticut DPH, Chart Book: Availability and Utilization of Health Care Services at Acute Care Hospitals and Federally Qualified Health Centers (2011)

⁵ CT Office of Health Care Access (includes Medicaid, Medicare, commercial and uninsured), 2009; MA: Massachusetts Health Care Cost Trend Efficiency of Emergency Department Utilization in Massachusetts, 2010

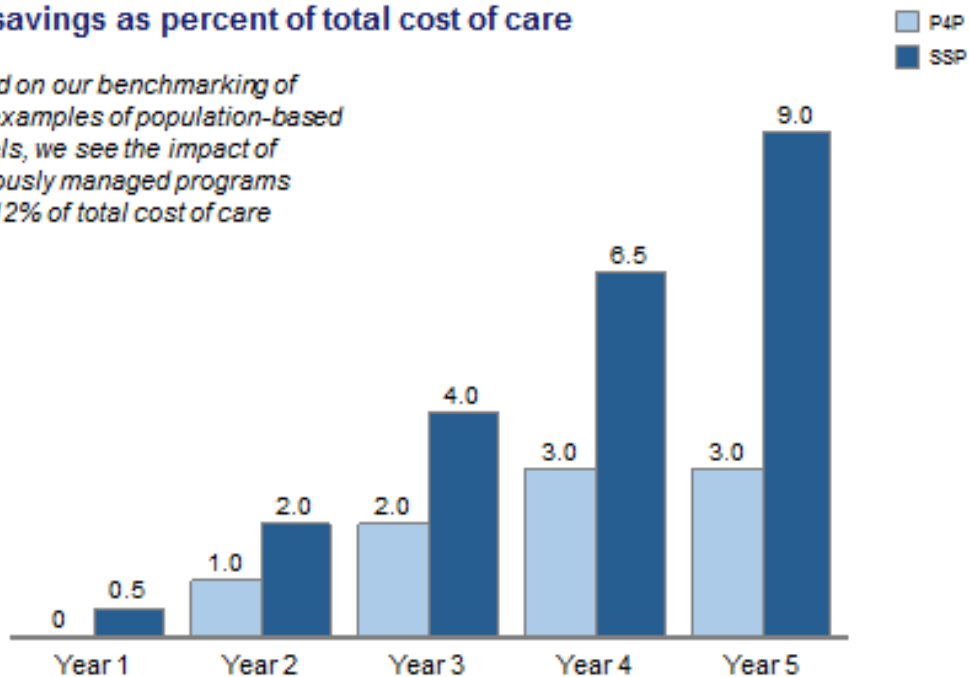
⁶ Patient-Centered Primary Care Collaborative report on PCMH outcomes and savings Health Affairs 28(5), 2009. Transforming the role of a Medicaid health plan from payer to partner, Commonwealth Fund, 1423(5), 2010.
Commonwealth Fund, "HealthPartners: Consumer-focused Mission and Collaborative Approach Support Ambitious Performance Improvement Agenda," Group Practice Journal, "HealthPartners Medical Group: Commonwealth Foundation Case Study, Colorado Children's Healthcare Access Program: Helping Pediatric Practices Become Medical Homes for Low-Income Children, 2010
Paulus RA, et al. Health Affairs 2008; Steele G. Lecture ACC Health System Reform Summit 2009
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NYCCP website (<http://www.carecoordination.org>)
Care Model Process," November/December 2006.
CMS: Evaluation of Medicare Care Management for High Cost Beneficiaries (CMHCB) Demonstration: Massachusetts General Hospital and Massachusetts General Physicians Organization (MGH), September 2010.
Massachusetts General Hospital's Program to Coordinate Care for High Risk Medicare Patients: A Success Story; MedPAC: Care coordination in fee-for-service Medicare, June 2012.

Many other examples of population-based models have been implemented without strong evidence of impact. Contributing factors have included: lack of focus on high-risk populations; reliance on structural measures of capabilities without direct incentives for new processes and better outcomes; insufficient support for primary care practice transformation; and a weak business case for change based on insufficient reward levels and/or participation by only one payer representing a small fraction of a provider's patient panel.

We believe that our model design, if fully supported on a multi-payer basis, will address the pitfalls associated with less successful pilots. Our goal is that participating providers, over the course of 5 years, will eliminate unnecessary healthcare spending representing 6-12% of the total cost of care for populations who are in-scope for shared savings programs. We have assumed a more moderate level of impact from pay-for-performance programs that introduce lower levels of upside gain and do not include any downside risk.

Gross savings as percent of total cost of care

Based on our benchmarking of ~20 examples of population-based models, we see the impact of rigorously managed programs at 6-12% of total cost of care



SOURCE: Assumptions used for impact projections, based on review of case examples in literature

We find this projected level of impact to be consistent with the range of impact observed in successful ACO, PCMH, and other programs similar to our AMH model. We believe that the principal challenge in achieving this level of impact will be to bring the same level of practice transformation support and rigorous performance management to a state-wide implementation that has been brought to past efforts implemented at a

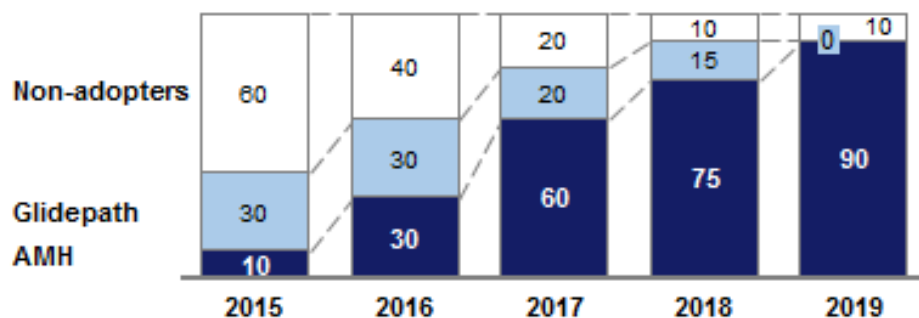
smaller scale, frequently by self-selecting groups of providers with highly motivated leadership teams.

TARGETED PACE OF IMPLEMENTATION

Our projections for the potential impact of our model is based on achieving our bold aspiration that by 2019 at least 90% of Connecticut primary care providers (weighted by patient panel size) would achieve AMH recognition, increasing steadily from a baseline of 10% estimated for 2015. This pace of implementation assumes that by 2015, 10% of PCPs are prepared to meet AMH criteria, and an additional 30% are on a glidepath to transform their practices, with additional practices transitioning into the glidepath and then achieving AMH recognition over time.

Statewide investment in practice transformation

% of PCPs working toward Advanced Medical Home certification



We believe that this level of provider adoption is achievable only with significant support for the AMH model across Medicare, Medicaid, and Commercial payers, including self-funded employers. We estimate that the State can directly influence healthcare payment for 23% of the population covered by Medicaid and the State Employees Health Plan. Medicare participation would bring an additional 17% of the population. Commercial fully-insured plans would bring approximately 24% of the population, with the overwhelming majority of that volume represented by the payers who have participated closely in the development of our State Healthcare Innovation Plan.

We also assume meaningful adoption of new models by self-funded employers, based on the strong leadership we have found among some self-funded Connecticut employers on this issue. Our Commercial payers also may indirectly influence the adoption of our proposed model by self-funded employers, the majority of whom have benefits administered by Commercial insurers based on networks that have been historically contracted under the same terms spanning fully insured and self-insured business. Our projections assume that about half of self-funded employers adopt the

model in 2015 and that as we gain momentum and evidence of success, nearly all self-funded payers adopt the model over time, in addition to fully insured payers, Medicaid, and Medicare.

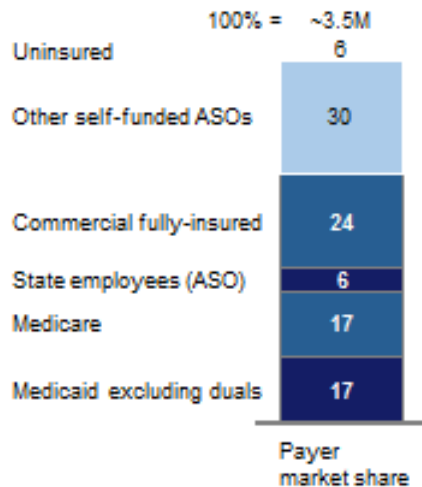
While our Plan does not prescribe a direct link between AMH status and shared savings, our goals for impact assume that the early adopters of the model (40% of PCPs in 2015) participate in shared savings. We also assume that a majority of those who elect to not participate in AMH practice transformation in 2015 nonetheless participate in pay-for-performance models, and that they transition to shared savings models over time.

Our belief that 40% of PCPs may participate in shared savings by 2015, and more than 80% by 2019 is based on research conducted by our Office of State Comptroller in September, 2013, involving surveys of the leading carriers in the state identifying 11 emerging provider systems, medical groups, Independent Practice Associations, and clinically integrated networks that have either already negotiated a shared savings arrangement for total cost of care with at least one carrier, or are taking steps to do so. Our financial projections are based on an assumption that two thirds of these PCPs would participate in shared savings by 2015, and that the remainder would migrate from P4P to shared savings by 2019 in addition to the majority of other PCPs not currently affiliated with one of these groups, depending on the success they see among early adopters.⁷

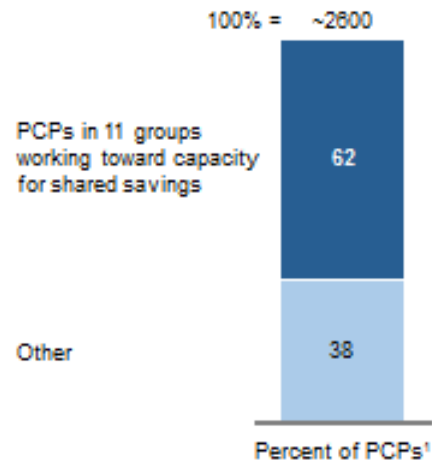
⁷ Estimates of the percentage of PCPs participating in these large groups varies from 40-60%. Our projections are based on 40% adoption of shared savings models by 2015.

Breakdown of population by payer type, and PCPs by affiliation

Insurance status of individual lives
% of individuals (2014 estimate)



PCPs with groups making progress toward SSP
% of PCPs (Estimate as of Sept 2013)



¹ PCP includes internal practice, general practice, family medicine, OB/GYN, and pediatrics. ² Excludes dual eligibles.
SOURCE: Interstudy, CT Office of the State Comptroller, CHNCT for average Medicaid enrollees AMA Physician Masterfile via CT SIM workforce taskforce report, literature review

REINVESTMENT OF SAVINGS IN THE DELIVERY SYSTEM

Achieving the level of impact described previously will require meaningful investments in the delivery system, both to offset the cost of new capabilities and processes (e.g. care coordination for high-risk populations) and reductions in provider productivity during the course of practice transformation, as well as to provide a meaningful incentive to undertake the changes. Most providers participating in our workgroups believe that some level of upfront investment is necessary, whether in the form of care coordination fees, enhanced fee-for-service payments, or otherwise. Most payers are supportive of making upfront investments only for practices that demonstrate the capacity and motivation to transform, and only as a true “advance” on shared savings payments, meaning that they would not continue beyond the first year without demonstration of improvements in resource utilization that offset the cost of the upfront investments.

Our current assumption is that payers will independently determine whether to offer care coordination fees or other upfront investments, and that the level of funding for such payments would be determined independently by each payer. Similarly, we anticipate that payers will independently determine the level of bonus payments and/or shared savings payments; in the case of Commercial insurers, we anticipate that

such terms may vary from one provider to the next based on contract negotiations between payers and providers.

As an input into our projections, we have examined the level of care coordination fees and shared savings distributions paid to providers under the Comprehensive Primary Care initiative, the Medicare Shared Savings Program and other models supported by CMMI, as well as under Commercial and Medicaid PCMH and ACO programs in Connecticut and other parts of the U.S. based on published literature as well as interviews with experts familiar with these arrangements. We have also considered the level of distributions necessary to provide for meaningful incentives to independent physicians, as well as physicians employed by or affiliated with hospital systems for whom reductions in avoidable admissions may mean lost contribution margin.

Again, we anticipate that the mix of upfront investment and shared savings payments as well as the level of such payments may vary by payer, and may be different for providers who have the scale and capabilities to accept downside risk. We also anticipate that hospital-based provider organizations may require a higher potential payout to offset lost contribution margin attached to reductions in hospitalizations. Payers may be willing to offer higher payout levels to these organizations depending on their willingness to in turn accept downside risk.

Based on these considerations, we have assumed in our projections that an average of 30-50% of savings achieved through implementation of the model will be paid to providers in the form of bonus payments and shared savings, net of increased spending on care coordination. Total reinvestments in the delivery system would reach \$800 million per year by 2019 if our plan were fully and successfully implemented.

PROGRAM INVESTMENTS

We estimate that fully implementing the plan as outlined will require an average of \$25-30 million per year investment through 2019 for primary care practice transformation, health information technology development, and program management (i.e., detailed design, implementation, stakeholder engagement, and self-evaluation). We anticipate that we will be able to fully realize this investment with the support of SIM test grant funding. In the absence of test grant funding we intend to proceed with implementation; however, we will re-evaluate our priorities and narrow the scope accordingly.

These costs are based on benchmarking the level of investment made by other States as well as private payers making at-scale investments in similar initiatives. Relative to benchmarks, we have scaled these investments based on the size and fragmentation of our primary care workforce, as well as the scope and complexity of our model in comparison with models implemented in other markets.

Program investments¹

	Benchmark range	Connecticut estimate	Total budget (\$M)
Practice transformation	<ul style="list-style-type: none"> \$10,000-50,000 per PCP site 	<ul style="list-style-type: none"> 1600 – 2000 PCP sites 50% requiring practice transformation support 18-month transformation support program \$24,000-30,000 per site 	<ul style="list-style-type: none"> 2015: 6-9 2016: 6-9 2017: 4-7 2018: 3-5 2019: 0
Health information technology ²	<ul style="list-style-type: none"> \$20-30M over 3 years \$3-5M per year thereafter 	<ul style="list-style-type: none"> \$30M over 3 years based on relatively modest HIT capability in the state \$4M per year based on high number of payers, moderate PCP fragmentation 	<ul style="list-style-type: none"> 2015: \$10M 2016: \$10M 2017: \$10M 2018: \$4M 2019: \$4M
Program management	<ul style="list-style-type: none"> \$10-30M per year for initial 3-4 years \$3-5M per year thereafter 	<ul style="list-style-type: none"> \$10-15M per year for 3 years beginning 2014, focused on AMH, excluding support for special needs populations Tapering to \$3M per year thereafter 	<ul style="list-style-type: none"> 2014: 10 2015: 15 2016: 13 2017: 4 2018: 3 2019: 3

¹ Does not include program-specific investments (e.g. Choosing Wisely), SNAP/NuVal, workforce (e.g., CT Service Track, OHW training)

² Excludes HIE costs

SOURCE: Literature review, testing grant application review

NET SAVINGS TO THE SYSTEM

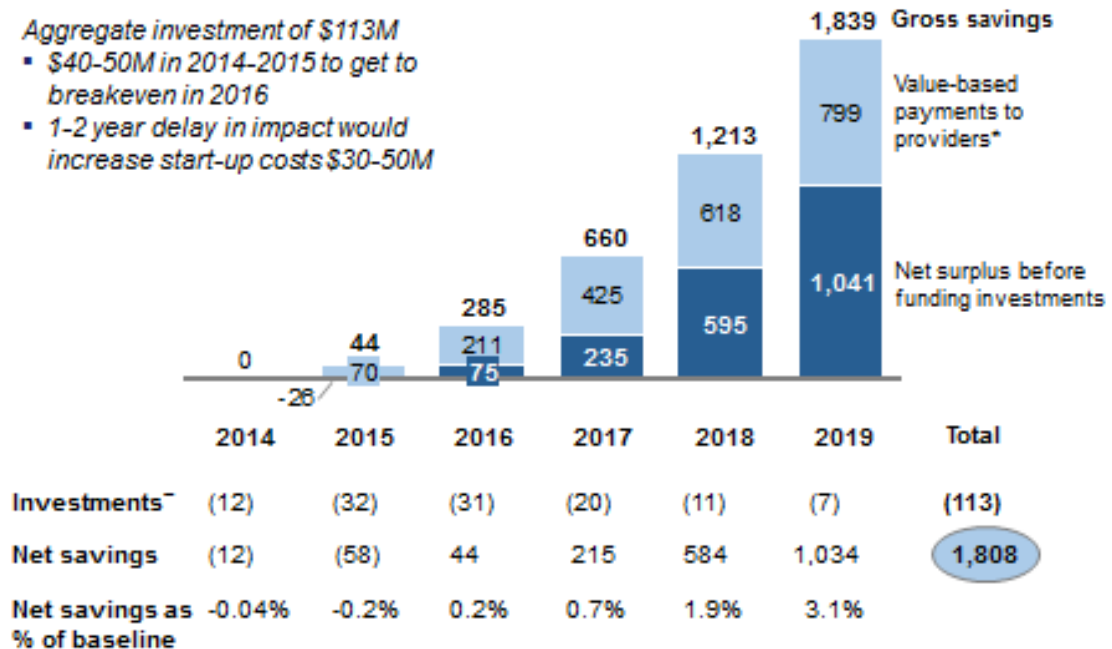
If fully and successfully implemented, our plan could achieve \$1.5-2.0 billion in gross savings in 2019, or \$1 billion net of program investments and value-based payments to providers.

Potential financial impact – All Connecticut

\$ millions

Aggregate investment of \$113M

- \$40-50M in 2014-2015 to get to breakeven in 2016
- 1-2 year delay in impact would increase start-up costs \$30-50M



[~]Includes care coordination fees, shared savings, and bonus payments tied to quality, experience, and efficiency

^{**}Reflects practice transformation support, HIT, and Program Management

Based on the pace of implementation reflected in our plan, we would achieve breakeven on our investments by 2016, and by 2018 we would reduce the annual rate of increase in healthcare spending by 1-2 percentage points, bringing it more closely in line with the long-term growth rate of our economy.

Net savings to our Medicaid program would exceed \$130 million per year by 2019 for the non-expansion population for which State General Revenues cover 50 percent of spending, translating to \$65 million per year in savings to State General Revenues. This does not include additional savings for the Medicaid expansion population, which would largely accrue to reductions in federal spending.

Net savings to the Medicare program would exceed \$300 million in 2019, whereas net savings to Commercial insured and self-insured payers would exceed \$500 million per year.

SUSTAINABILITY

Assuming successful implementation of our plan at the pace outlined above, the level of savings outlined above would continue to grow over time in proportion to baseline healthcare spending growth and as providers continue to eliminate unnecessary spending from the system, with those providers joining the model in 2017 starting their climb toward greater quality and efficiency over a 5-year period stretching to 2022. As the AMH model continues to mature, our goal for 1-2 percentage point reduction in healthcare spending growth may be sustained through 2022.

Sustained mitigation of trend beyond this timeframe will be dependent on improvements in prevention driven by our Health Enhancement Communities, as well as reductions in year-over-year wage increases for our healthcare workforce based on an expansion in capacity and shift in skill mix. The direct impact of these changes is not included in our near-term financial analysis, as further definition is required around the policy changes supporting our goals for community health improvement and workforce development, and the return on these investments is likely to fall outside the 5-year time horizon used for our analysis.

FINANCIAL RISK

As illustrated above, successful implementation of our plan could enable us to reach breakeven on our investments by 2016, after an initial investment of approximately \$70-100 million, reflecting negative net savings through 2015, plus ~\$30 million in program investments in 2016 that will run ahead of medical cost savings accruing to participating payers. A one- to two-year delay in impact would increase our start-up costs by \$30-50 million and delay achievement of breakeven as well as abatement of healthcare spending growth.

Factors that could lead to such a delay include: delays in funding or resourcing for program investments; low participation of payers and/or under-funding of practice transformation and/or provider incentives; low uptake of providers; or care coordination fees and/or shared savings payments made without rigorous alignment with activities and outcomes that drive near-term return on investment.